### Natural Gas Prices

# Economic Impact on Residential and Small Commercial Customers

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## Qualities of Natural Gas Service

- "A potential danger to human health and safety"...

  "if residential utility customers were deprived of electric or gas service used for heating" (KCC Docket No. 114,337-U, Order dated October 18 1983)
- No information about how much natural gas you are using when you are using it.
- Very little information about how much the natural gas costs while you are using it.

## Impact on Consumer Bills

- Charges
  - Monthly Customer Charge
  - Volumetric Charge
  - ◆ Cost of Gas (PGA/COGR)
- Variables
  - ◆ Weather
  - ◆ Housing Efficiency
  - ◆ Consumer Behavior

## New York Mercantile Exchange

# Natural Gas Futures Contract Nymex.com

September 11, 2003

■ September 29, 2003

■ Oct. 2003 \$4.97 ■ Oct. 2003 \$4.43

■ Nov. 2003 \$5.18 ■ Nov. 2003 \$4.62

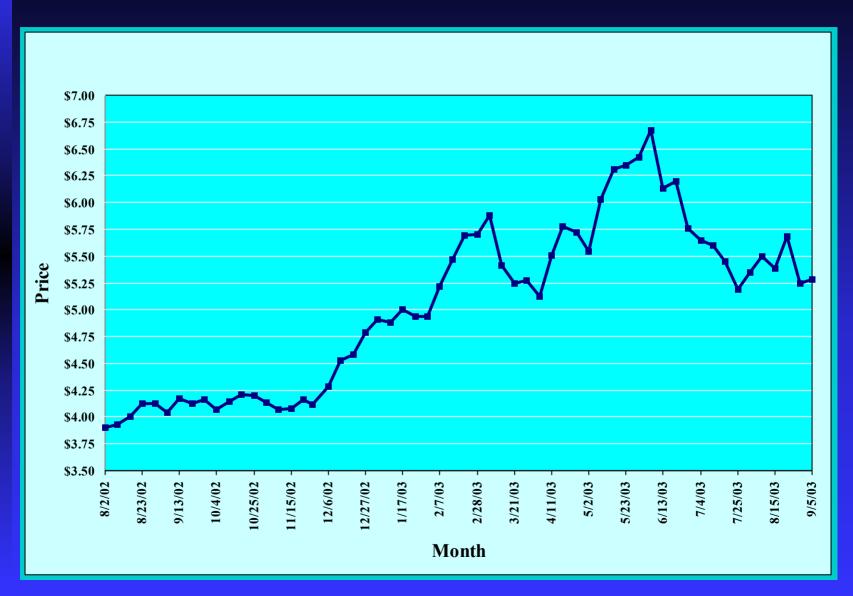
■ Dec. 2003 \$5.42 ■ Dec. 2003 \$4.88

■ Jan. 2004 \$5.76 ■ Jan. 2004 \$5.07

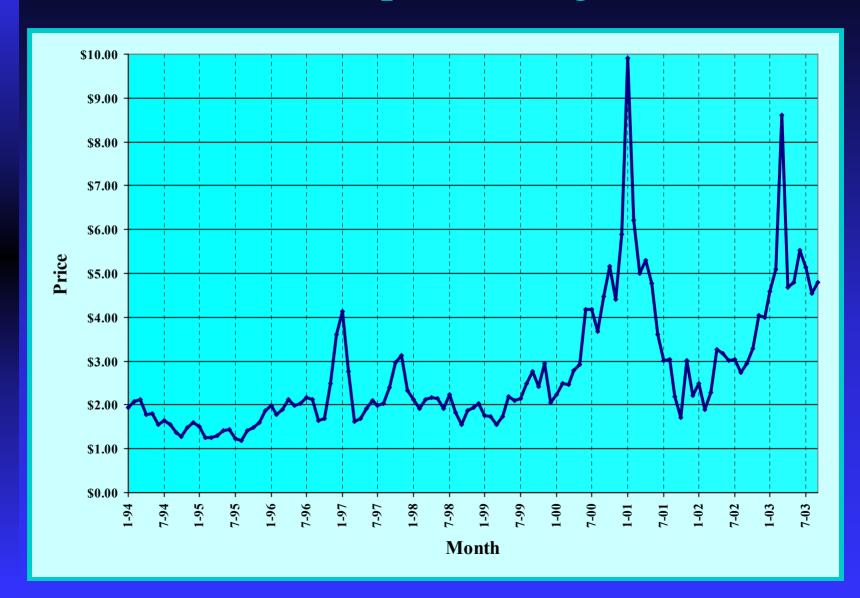
■ Feb. 2004 \$5.51 ■ Feb. 2004 \$5.03

■ Mar. 2004 \$5.40 ■ Mar. 2004 \$4.95

### Average Price of Nov. 03- Mar. 04 Strip



### 5 Midcontinent Pipeline Avg Index Price



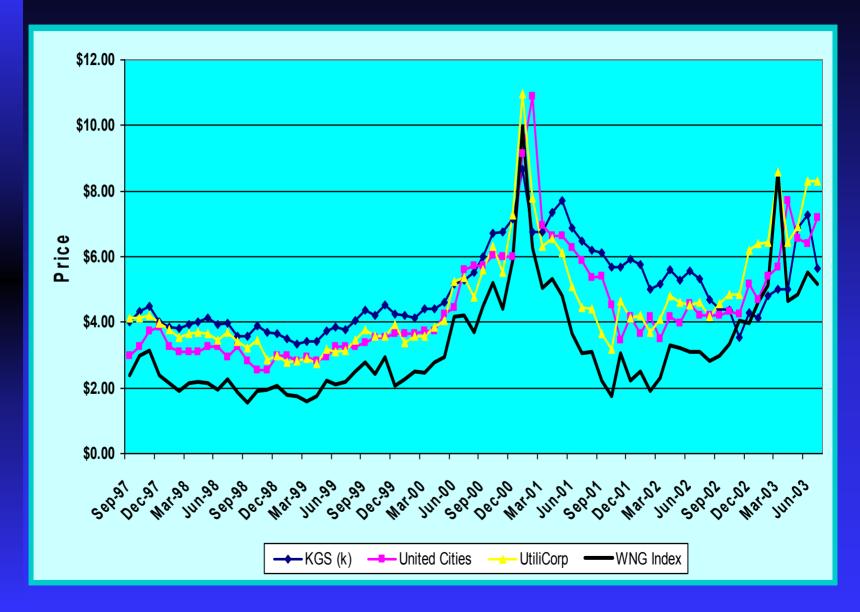
#### Cost of Gas on Consumer Bills

- Actual cost of gas
- Upstream gathering, storage and transportation
- ACA adjustment (prior over/under recovery)
- Hedging costs and revenues
- Refunds

# KANSAS CORPORATION COMMISSION NATURAL GAS BILL COMPARISON RESIDENTIAL 10 M.C.F.

Jul-03							
	CUSTOMER	COMMODITY	COST OF	BILL W/O	COST	% OF NAT.	% OF KS.
COMPANY(1)	CHARGE	MARGIN	GAS	TAX	PER MCF	AVG.	AVG.
NAT. AVG.(2)				\$98.99	\$9.90		
ATMOS ENERGY (KV)	\$6.00	\$26.44	\$82.56	\$115.00	\$11.50	116.17%	137.28%
KGS	\$6.20	\$14.25	\$56.46	\$76.90	\$7.69	77.69%	91.80%
MIDWEST ENERGY-M	\$10.00	\$12.00	\$67.03	\$89.03	\$8.90	89.93%	106.27%
	010.55	0.10.55		<b>A</b> 100 CC	0.10.55	101 0001	10.1.0001
MIDWEST ENERGY-K	\$10.00	\$12.00	\$81.92	\$103.92	\$10.39	104.98%	124.06%
471100 FNFDOV (100)	05.00	0.17.74	<b>47.1.10</b>	000.00	00.00	0.4.000/	140 440/
ATMOS ENERGY (UCG)	\$5.00	\$17.74	\$71.18	\$93.92	\$9.39	94.88%	112.11%
A CUIII A	07.00	<b>#40.50</b>	400.00	0400.40	040.04	440 540/	400 500/
AQUILA	\$7.00	\$19.52	\$82.88	\$109.40	\$10.94	110.51%	130.59%
			WEIGHTED				
			AVERAGE	\$83.77		84.62%	
			AVEIVAGE	ψ03.11		04.02/0	
(1) Service areas with appro	ox 5 000 or mor	e residential cus	tomers				
(2) Bureau of Labor Statistic		o regraditial dae					
(2) Daroda or Edoor Station							

### Cost of Gas on Consumer Bills



# Kansas Gas Service Example Residential

1) Average January Usage w/ January 2003 Prices (20 Mcf)

	Customer Charge	Volume Charge	<u>Gas Cost</u>	<u>Bill</u>
Rate	\$6.20	\$1.42	\$4.12	
Charge	\$6.20	\$28.40	\$82.40	\$117.00

■ 2) Average January Usage w/ New KGS Rates and Hypothetical Gas Cost (20 Mcf)

	Customer Charge	Volume Charge	Gas Cost	<u>Bill</u>
Rate	\$8.95	\$1.75	\$6.25	
Charge	\$8.95	\$35.00	\$125.00	\$168.95

■ 3) High January Usage w/ New KGS Rates and Hypothetical Gas Cost (35 Mcf)

	Customer Charge	Volume Charge	<u>Gas Cost</u>	<u>Bill</u>
Rate	\$8.95	\$1.75	\$6.25	
Charge	\$8.95	\$61.25	\$218.75	\$288.95

■ 4) High January Usage w/ New KGS Rates and High Hypothetical Gas Cost (35 Mcf)

	Customer Charge	Volume Charge	Gas Cost	<u>Bill</u>
Rate	\$8.95	\$1.75	\$8.00	
Charge	\$8.95	\$61.25	\$280.00	\$350.20

# Kansas Gas Service Example General Service

■ 1) Average January Usage w/ January 2003 Prices (60 Mcf)

	Customer Charge	Volume Charge	Gas Cost	<u>Bill</u>
Rate	\$10.00	\$1.33	\$4.12	
Charge	\$10.00	\$79.80	\$247.20	\$337.00

■ 2) Average January Usage w/ New KGS Rates and Hypothetical Gas Cost (60 Mcf)

	Customer Charge	Volume Charge	<u>Gas Cost</u>	<u>Bill</u>
Rate	\$17.00	\$1.62	\$6.25	
Charge	\$17.00	\$97.20	\$375.00	\$492.20

■ 3) High January Usage w/ New KGS Rates and Hypothetical Gas Cost (90 Mcf)

	Customer Charge	Volume Charge	Gas Cost	<u>Bill</u>
Rate	\$17.00	\$1.62	\$6.25	
Charge	\$17.00	\$145.80	\$562.50	\$725.30

■ 4) High January Usage w/ New KGS Rates and High Hypothetical Gas Cost (90 Mcf)

	Customer Charge	Volume Charge	Gas Cost	<u>Bill</u>
Rate	\$17.00	\$1.62	\$8.00	
Charge	\$17.00	\$145.80	\$720.00	\$882.80

# Aquila Example Residential

	1) Average	January Usage w/	January 2003	Prices (20 Mcf)
_	I) Average.	famuary Osage w/	January 2003	1 11003 (20 11101)

	Customer Charge	Volume Charge	Gas Cost	<u>Bill</u>
Rate	\$7.00	\$1.95	\$6.40	
Charge	\$7.00	\$39.00	\$128.00	\$174.00

#### 2) Average January Usage and Hypothetical Gas Cost (20 Mcf)

	Customer Charge	<u>Volume Charge</u>	Gas Cost	<u>Bill</u>
Rate	\$7.00	\$1.95	\$6.25	
Charge	\$7.00	\$39.00	\$125.00	\$171.00

#### ■ 3) High January Usage and Hypothetical Gas Cost (35 Mcf)

	Customer Charge	Volume Charge	Gas Cost	<u>Bill</u>
Rate	\$7.00	\$1.95	\$6.25	
Charge	\$7.00	\$68.25	\$218.75	\$294.00

#### • 4) High January Usage and High Hypothetical Gas Cost (35 Mcf)

	Customer Charge	Volume Charge	Gas Cost	<u>Bill</u>
Rate	\$7.00	\$1.95	\$8.00	
Charge	\$7.00	\$68.25	\$280.00	\$355.25

## Summary for Consumers

- Cannot Control the Weather
- Minimal Control of Natural Gas Prices
  - ◆ Hedging
  - ◆ Purchasing Strategies
- Can Control How Much Natural Gas You Use
  - ◆ Weatherization/Conservation
  - Behavior Adjustments
- Better Information